

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1.-7. (canceled).

8. (currently amended): A process for producing an oxygen-containing compound, comprising reacting an olefin and oxygen in a gas phase in the presence of a the catalyst, for the production of an oxygen-containing compound according to claim 1 wherein the olefin is propylene, the oxygen-containing compound is at least one compound selected from acetone, propionaldehyde, propionic acid and acetic acid; and the catalyst is represented by the following formula:

Pd/W_aZrO_x

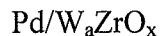
wherein Pd is a palladium-containing compound, a is a W/Zr molar ratio of from 0.01 to 5.0, and x is a value defined by the oxidized state of tungsten (W), zirconium (Zr) and palladium (Pd), and wherein the content of palladium element in the catalyst is from 0.001 to 15 parts by mass based on 100 parts by mass of W_aZrO_x.

9. (currently amended): A process for producing acetic acid, comprising reacting ethylene and oxygen in a gas phase in the presence of a the catalyst for the production of an oxygen-containing compound according to claim 1 represented by the following formula:

Pd/W_aZrO_x

wherein Pd is a palladium-containing compound, a is a W/Zr molar ratio of from 0.01 to 5.0, and x is a value defined by the oxidized state of tungsten (W), zirconium (Zr) and palladium (Pd), and wherein the content of palladium element in the catalyst is from 0.001 to 15 parts by mass based on 100 parts by mass of W_aZrO_x .

10. (new): A process for producing an oxygen-containing compound, comprising reacting an olefin and oxygen in a gas phase in the presence of a catalyst, wherein the olefin is at least one member selected from 1- butene, cis-2-butene and trans-2-butene, the oxygen-containing compound is at least one compound selected from methyl ethyl ketone, n-butylaldehyde, butyric acid, propionaldehyde, propionic acid, acetaldehyde and acetic acid, and the catalyst is represented by the following formula:

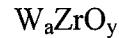


wherein Pd is a palladium-containing compound, a is a W/Zr molar ratio of from 0.01 to 5.0, and x is a value defined by the oxidized state of tungsten (W), zirconium (Zr) and palladium (Pd), and wherein the content of palladium element in the catalyst is from 0.001 to 15 parts by mass based on 100 parts by mass of W_aZrO_x .

11. (new): The process according to claim 9, wherein the catalyst is produced by a process comprising the following first and second steps:

First Step:

a step of causing a tungsten compound and a zirconium compound to coexist and heat-treating these compounds to produce a compound represented by the following formula:



wherein a is a W/Zr molar ratio, and y is a value defined by the oxidized state of tungsten (W), and zirconium (Zr);

Second Step:

a step of loading palladium compound on the compound W_aZrO_y obtained in the first step to obtain a catalyst for the production of an oxygen-containing compound.

12. (new): The process according to claim 11, wherein in said first step, the heat-treatment temperature is from 400 to 1,200°C.